

SEQUENCE LISTING

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<120> Compositions and Methods Relating to Breast Specific Genes and Proteins

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<150> 60/268,289

<151> 2001-02-13

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<212> DNA
<213> Homo sapien

<400> 13
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665

<210> 14

<211> 762

<212> DNA

<213> Homo sapien

<400> 14

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<212> DNA

<213> Homo sapien

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 <211> 1500
 <212> DNA
 <213> Homo sapien

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<212> DNA
<213> Homo sapien

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<210> 18
<211> 1098
<212> DNA
<213> Homo sapien

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 <211> 319
 <212> DNA
 <213> Homo sapien

<400> 19
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<210> 20
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<400> 20
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<210> 21
 <211> 159
 <212> DNA
 <213> Homo sapien

<400> 21
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<210> 22
 <211> 2687
 <212> DNA
 <213> Homo sapien

<400> 22
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 <211> 539
 <212> DNA
 <213> Homo sapien

<400> 23
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<210> 24
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 <213> Homo sapien

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<212> DNA
<213> Homo sapien

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<223> a, c, g or t

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<400> 25
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gactacatca gaggagagcc gatgaggagc agaggaagaa aatcactgga tgaagccgat 480
gaggaaggga tgggaggagt aacgagatga ggccgagtaa tcacgaccaa taacatctcg 540
cagcccgtag tgataagtag agcagagaat taccacgtcg caaaaaaaaa aaaaaaaaaa 600
aaaaaagagg cgggaggaaa agaggggaaa aaagaaggac accgggggaa aaagggtaac 660

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ccagggaaaa aatcccaaaa ataccacgca aaaacgaaga agg

703

<210> 26
 <211> 811
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (333)..(333)
 <223> a, c, g or t

<400> 26
 acaaaacaaa acaaaaaaaaa gagatctacc tttagtgcaca cagaaatatg tttataatgt 60
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 ttgtcaaact catggcactg tttaccaaag agagttcatt ttactgtgtc taaattcgac 180
 ttcaataaga gcagattaca aaatgatatt caagaggaat ccagtgtgtg tgtgtgcgtg 240
 tgtgtgtgtg ttgtgtgtgt gtgttgtgtg tgtgtgtgtg tgctacatat aataaataat 300
 caggcggcca gcggcagtag tagtaatcac tantcgtgat atactcctaa gcactggttg 360
 gtgcgtcgac gagcagcgag catgaatcac cgtgagggat aagatgatgc gagaccacgc 420
 cgtggacaat aagtggatga aacccctatc tctaacata ataaaaacta acaaaataat 480
 tacgaccagg gctagtgggg agctagtgtc gctcgtgata actcccgaga ctacatcaga 540
 ggagagccga tgaggagcag aggaagaaaa tctactggatg aagccgatga ggaagggatg 600
 ggaggagtaa cgagatgagg ccgagtaatc acgaccaata acatctcgca gcccgtagtg 660
 ataagtagag cagagaatta ccacgtcgca aaaaaaaaaa aaaaaaaaaa aaaagaggcg 720
 ggaggaaaaag aggggaaaaa agaaggacac cgggggaaaa agggtaaccc agggaaaaaa 780
 tcccaaaaat accacgcaaa aacgaagaag g 811

<210> 27
 <211> 652
 <212> DNA
 <213> Homo sapien

<400> 27
 agaatgataa ctcatatggg cgaatgggcc tctgatgcat gtcgagcggc gcagtgtgat 60
 ggattggtcg cgcccgaggt acttctaccc gagcacagac tgtgtggact ttgccccctc 120
 agcagccgcc accagtgatt tctataagag ggaaacaaac tgtgacatct gctatagtta 180
 atagaaatta cagtaattca gaacatggca tgggtatatc tatttttcta ccacgtctag 240
 atgacactgc aaaatatgca acttggtaac acaatatccc aagcacagtt tacatgtcac 300

tattttccaat tttctgatgc taagcattca tatgaagtcc tcagaccogg tcacagcgcc 360
 actcctactt tgtatgctca tagtttaaat tttttagga aactttcaat tgttttactt 420
 tttgtataac gaacaaatgc tgtctccttt tttactaata aataatttgt attacaaaaa 480
 aaaaaaaaaa aaaaaaaaaa ggcgggggggg taatcagggg ccaatacggg gggtcccggg 540
 gggagaatgg gttaccgggt cacagttcca cacatttgcg agacaacaga cgggagaaga 600
 ggcaggacca agacgcgagg cacgccaaga gcaagcgcac agagaaacgg ag 652

<210> 28
 <211> 1511
 <212> DNA
 <213> Homo sapien

<400> 28
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 ggagcgcgga aaaggcggag aaaaggggcg agggagagcg ggcagaaggc aaagacagaa 120
 gggagcgagg gagggagttc ctcgggcctg gccctttac taggtcagtc tggcaggtac 180
 ctcgccgggc caggacgggg ctggccaaac ctcaccgctt gctcccgggc tggcttccag 240
 accaagggca cgcagaggtc ggagcctgcc cagaagccac acctggccag aaaaaccgaa 300
 ggtgtatcaa ggtgtccgag tgaagatcac agtgaaggag ctgctgcagc aaagacgggc 360
 acaccaggcg gcctccgggg gaacccggtc cggaggcagc agtgtccacc tttcagaccc 420
 agttgcacca tcttctgcag gactgtattt tgagcctgaa ccaatttctt ccacgcccac 480
 ttatttgcaa cggggagaat tttccagttg tgtttcatgt gaagaaaact caagctgcct 540
 cgaccagatc tttgattcct accttcagac agagatgcac ccggagcctt tgetcaattc 600
 cacacaaagt gtcacacacc atttccaga cagcttccag gccacccctt tctgctttaa 660
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 cagttactcg ccagtgcagc tgccttcata tgctccagag aattacaatt cccctgcttc 780
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 tgacatctgc tatagttaat agaaattaca gtaattcaga acatggcatg ggtatatcta 1080
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 caatacgcgg gttcccgggg ggagaatggg ttaccoggtc acagtccac acatttgcca 1440
 gacaacagac gggagaagag gcaggaccaa gacgcgaggc acgccaagag caagcgaca 1500
 gagaaacgga g 1511

<210> 29
 <211> 337
 <212> DNA
 <213> Homo sapien

<400> 29
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 atgcatggtc gcggcgaggt gcaggaaaat atacagatat taaagatcag atttaattct 120
 ttggtataag catgaaactg ttactgatag ctttccatgg cgagcataaa ccatgaagca 180
 actcaagaag catgagagac aacaatgaaa tctagtatac aatgcagggc aggccaagaa 240
 cgatgtctgc tttacaggaa aagtcaacac taacaatcta ctcctgagaa actaacacct 300
 atttagatgt ttttaacata atggcaaact aaaatgt 337

<210> 30
 <211> 954
 <212> DNA
 <213> Homo sapien

<400> 30
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 gcccgagca atgaaaacct cgacaaaata gatatgtctt tggatgatat catcaagttg 120
 aatcgaaagg aagggaagaa gcagaatttt ccaagactaa atagaagact cctccagcaa 180
 agtggtgccc agcaattcag gatgagagtg cgatggggaa tccaacagaa ttctggtttt 240
 ggtaagacta gtctgaatcg tagaggaaga gtaatgcctg gaaagagacg tcctaattga 300
 gttatcactg gccttgacgc taggaaaacg actggaattc gaaaaggaat tagtcctatg 360
 aatcgccac ctctaagtga caagaatata gaacaatatt ttccagtgtt aaaaaggaag 420
 gcaaaccctt tgagacaaaa tgaagggcag aggaaaccag tagcagttct caagagacct 480
 agccagctaa gcagaaaaaa taacattcca gctaatttta ccaggagtgg aaataaatta 540
 aatcatcaga aagatactcg tcaggcaact tttcttttca gaagaggcct gaaggtgcag 600

gccagttga atacagaaca actgctagac gatgtagtag caaagagaac tegtcaatgg 660
 cggacttcca ccacaaatgg agggattttg actgtatcta ttgacaatcc tggagcagtg 720
 caatgcccag taactcagaa accacgatta actcgtactg ctgtaccttc atttttaaca 780
 aagcgggagc aaagtgcagt caagaaagtt cctaaagggtg ttcccttgca gtttgacata 840
 aacagtgtcg gaaaacagac aaggattacg ttgaaataac ggtttgggat cctgaaggaa 900
 caaaaagccc ctttcccata caacaaaagg ggaaacccct ttgtcccgt ggga 954

<210> 31
 <211> 260
 <212> DNA
 <213> Homo sapien

<400> 31
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 aggaagggtg ggaaagttaa tatccttaat ttgactactc ttggatatta aaatctttct 120
 attaattaaa aagactttta gacaacctct taaatggaat tacactatgg aaaacagggc 180
 tccccaaaa acacctaggc agaactgaga gttctttgaa aaccattccc aataaaaact 240
 aatgaaaaa taaatataaa 260

<210> 32
 <211> 1416
 <212> DNA
 <213> Homo sapien

<400> 32
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 ggattaaaga tgaataacac aaattgggtc atgacattag aacctaacac actgggtgctt 120
 tttaggaag ttgttgacat ccaaatcaca gaaccaaggt caaaagcaaa atacaaaggt 180
 accctcaaaa atatttacia tgaagtaaat aactaacag aatttaaaac aggtacaaaa 240
 tattgaaatg accaacgtta catgatttca agggttgtcc tttctgtgct ttttatctgt 300
 cagcacagga aggtgtggaa agtttatatc cttaatttga ctactcttgg atattaaaat 360
 ctttctatta attaaaaaga cttttagaca acctcttaa tggaattaca ctatggaaaa 420
 cagggctccc tcaaaaacac ctaggcagaa ctgagagttc tttgaaaacc attcccaata 480
 aaaactaaat gaaaaataaa tttaaaacaa agcttaaaaa aatatgcatt acctgacacc 540
 aaccttttct ggctgacaat atttattcat gaaaacatat cagctgtcta cctttaattt 600
 gtggaccaat gttttgtgaa agctaaagag ggcaggggtt aaaatagggc ttgaatttct 660
 cattctgtat agaccagcaa acttccctgt gcaaggcaag ttacatcac aaatccaaga 720

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atgtttgcat cctaaatgct agtttgcttc agcccctagt taacctcagg acttggtttg 780
catataaaag gtagacagct gatatgtttt catgaataaa tattgtcagc cagaaaaggt 840
tggtgtcagg taatgcatat ttttttaagc tttgttttat atttattttt catttagttt 900
ttattgggaa tgggttttcaa agaactctca gttctgccta ggtgtttttg ggggagccct 960
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tttgagggta cctttgtatt ttgcttttga ccttggttct gtgatttga tgtcaacaac 1260
ttccctaaaa agcaccagtg tgtaggttc taatgtcatg acccaatttg tgttattcat 1320
ctttaatcct gttttcagtc tctatgtgta cagcagtatt ttaataaaag aattacagag 1380
ataaaaaaaaa aaaaaaaaaa aaaaaaatat gcggtc 1416

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<210> 33
<211> 302
<212> DNA
<213> Homo sapien

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<400> 33
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ttaccagtaa aagtatgcat tttaaaagac gtttcagatt tatgcttttt acgtgaagct 120
gctaaactaa aagtaaattg aagaaaccaa gtctagtagg ttttttcttt tttagggtggg 180
ggtgggatgg gggagggttag ttacacttaa aatatcttct ccagagactg tatgtctcta 240
tactagactg taagctcttt gagggcagtc tgtcagattt atctttgtat cttccccagc 300
gg 302

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<210> 34
<211> 1344
<212> DNA
<213> Homo sapien

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<400> 34
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tatgtcaatg gaggtattat tttataatac ttgcattgac atgaagtggg ttcattggggg 120
aaaaccatga gctgtgaaca tggtagcaaa caagcatata ttcatttcaa aactttcctt 180
gcttttagca gagagaagcc tgtatatgtt acatgtgtga ctttcagtag tttaaagaga 240

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tgtttcaaaa aattgttgca tgtttttgat gcaatttggg aaattgttta cttcacaatg 300
tagtcattca taaaaaaaaat tcatgaaaat actgaacata tgtttgagga tttttctttt 360
cctttttaaa tttttttatt ttttctgaga cggagatctg ctcttacgcc caggctagag 420
tgaagtggcg cgatcttggc ttactgcaac ctccaccccc caggttcaag cgattctcct 480
gcctcagcct ccggagtagc tgggattaca ggcgcccgcc accacgtccg gctaattttt 540
gtattttcag tagagacggg gttttgctat gttggccagg ctggtctcaa actcctgacc 600
tcaagtgatc cacctgcctc ggccctccaa agtgtttaga taacagggtg gagccaccgt 660
gcccggtga agatttttct taattgcaat aaatattcag cattttttct aatgaaaatg 720
aattttgttt accagtaaaa gtatgcattt taaaagactt tcagatttat gctttttacg 780
tgaagctgct aaactaaaag taaatggaag aaaccaagtc tagtaggttt tttctttttt 840
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gctcctatac tagactgtaa gctctttgag ggcagtctgt cagatttatc tttgtatctt 960
ccccagcgcc tagtgtagtg ccttgccat aataggcgcc caataaatat tgatgaagaa 1020
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ctatgttctt tctgacttgc taagagagcc aagtgatagt ggctagtgat aagattgata 1260
cataaattgc tttactttga aataacactg gaaaacccta ccgtagacct gatcaagaaa 1320
aaaaaaaaa aaaaatgagc ggcc 1344

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<210> 35
<211> 163
<212> DNA
<213> Homo sapien

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<400> 35
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ttctaaaccc aaaagtgcta cctaagaaga aatttagcca aaaaataccc agctaaggta 120
gccatagcca agtgtattta agtatgttat agaatatatt tga 163

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<210> 36
<211> 643
<212> DNA
<213> Homo sapien

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<400> 36
ttcatttccc gaactgaagt atggaaattt ggtaatgttg tcattgaaca tctataccac 60

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tggatacaca tctgttcagc tctcatgaag ataaccaaac aactaaatag tgggtattaca 120
 cctccgttgc cctccaagac tgacaattat atgtatgcaa aaatgccagg ggaaggtttg 180
 caagagaagt gataatggat gataatggaa ttgatactgt atttaggatac ctttgtttgt 240
 tatcagtttt gtttgtttaac tataaaatat ttccattgg aaaggggtac ctataaatgt 300
 cttctgctgc taatatttat ctcagcactt tctaaaccca aaagtgtac ctaagaagaa 360
 atttagccaa aaaataccca gctaaggtag ccatagccaa gtgtatttaa gtatgttata 420
 gaatatattt gaaagcttcc ttccagtttg agctttgtat ctgctgtgga actgttatgg 480
 ttgattgggt agttattttt cattcttata aggttcaaag taacagctga ggatttagaa 540
 aacaagaata ccaaatagaa tacgaaataa taaagataaa ccaaaagaat accaaataat 600
 aaagattttt aagaaatgga aaaaaaaaaa aaaaaaaaaa att 643

<210> 37
 <211> 478
 <212> DNA
 <213> Homo sapien

<400> 37
 gcgtggctgc ggcgaggtac aaaaataaca gcatttagtt gcagattaga aacagatgtg 60
 aagggcgaaa aagcaccata ggaaggaca taagaggtcc ctggagtcag acttgggaga 120
 tgtgagtttt atcagttttg ccattaggta gttgtgtgca cccttgggca tatagcactt 180
 ttttggtaat tctattttcg cacttttcaa atgagatgca attagattag agactgtaaa 240
 gtaaaagctg ccatgcttca tttttttaa accaattaaa cgccattttt atacggaagt 300
 ttggacaaac aaaaacaaca aaaaaaacac aacaaaacag cttgggcggc tacttcgggtg 360
 gtcattacg cggtttccct ggtggtggac attgggtttc tccgctccac aattccccag 420
 acaacttagg gacgcaagaa accccgatca caaaagcact ccacacaacca cacacaca 478

<210> 38
 <211> 833
 <212> DNA
 <213> Homo sapien

<400> 38
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 ttaaaagttt agaccctcat acgaggtttg caatgggttac ttaagtagg acggagattc 120
 ccctagtcct ctataaaaga taatccactt tatcgtact acgattccgt tatttataga 180
 aagagaagat cgttctcgta gtacacatgt ttatggagga atatcttaag atagaacact 240

aattcatatc tatgacaaaa aaaatcacgg tagttcgcaa catcgtaccc atggcatctg 300
gactttcttg gctaaccgta gttacctgtg tatagaatcc acgttggttaa tcaatcagtg 360
aatcttcatt ctgcgctga ttogagaagt agaagacccg tcttctctac tttctcggt 420
ctaaacttta ctgactcaaa cgaagaagct gggcaactga caaaacagga caggttgttt 480
ttaatccagt ctacaaataa acaagacaat gcctgagtta gccctctata tagatttcag 540
gcttatgtg acctcgtgg aaatctgtg tttaactaaa agttaataaa aatacatatt 600
gttcatttta aaataattac tgattttgct tggggtaatc ccaaccctt accccaaatc 660
atatattttt aggacaagat ttctgcata accacaacct gggttcctcca cccaccatc 720
atagatgttt caataagaac cctggatcag gagaagcatc tctatctaca tgcttgctg 780
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<210> 39
<211> 718
<212> DNA
<213> Homo sapien

<400> 39
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tcacagagaa ttttaatgac attggaaaat gtaagaaatt tgaaaaaaag atggagtaaa 180
atatgtataa aattgataat agttgattta ggggtgtaga agtaaacata atTTTTctg 240
tttatatttt tctctatctt tttaaatttg ctaatgtgca tagattcttt taaaataata 300
agaaaataat aaagttaata cgttataaaa aatagggacc tggctgttga agtgcgatgg 360
agacaatttg ttagaacatg tggcttggtta cacagacgct tgagaagttg ttgagagaga 420
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ttactatcct atttaccaaa gtttgatgata tgtatttctg aatatattgt tgaagagctt 540
cacttctatc aagccatagc acttatttgg cactctgata taacaattta acataaaaac 600
cactcccaaa cagttaaaac cagctctaata ttccaatctg cagagtttta agcaaatgcc 660
ggattgtctg gacagagaaa atcctccaga ggagagccag agaaaataga tgtgaggg 718

<210> 40
<211> 1439
<212> DNA
<213> Homo sapien

<400> 40
gccgcaattt tttttttttt tttttttttt ttttttctgg acacaatatg tttaatat 60

gaagaatgat tacacatagc ttgttacaga tttccaaaaa acagtaggta cagtttttaa 120
 aatttacatt cacagagaat tttaatgaca ttggaaaatg taagaaactt tgaaaaaaga 180
 tggagtaaaa tatgtataaa attgataata gttgatttag ggtggtagaa gtaaacataa 240
 ttttttctgt ttatatTTTT ctctatcttt taaatTTTgc taatgtgcat agattctttt 300
 aaaataataa gaaaataata aggttaatac gttataaaaa atagggacct ggctgttgaa 360
 gtgcgatgga gacaatttgt tagaacatgt ggcttggtac acagacgctt gagaagtttg 420
 ttgagagaga acgattacct agaaacaaga gttacagtaa atggggtaaa aagggcaaaa 480
 gttcttcaga ttactatcct atttaccaaa gtttgtgata tgtatTTTga atatatgtga 540
 agagcttcac ttctatcaag ccatagcact tatttgtcac tctgatataa caatttaaca 600
 taaaattgag ttcattcaaa tgagcagaaa aggaaaaaaa tgtaagtatg tctactttcc 660
 cgggaatggt cttgcaccag tatctttcta ttcattgttag cattttctat gtaagaaaca 720
 aatacccaaa gacttttgta gtagagactc catctgttcc aatatagtca atatccttct 780
 atttgagcat caattagtgg ccttcaatta accaccttgc attcggtaat agtctgaagg 840
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 tatcacactt agccttccaa ggctctaaaa gcagtggcaa aggagggcta aacatacaaa 1020
 atgcaaaciaa cttgggtctgt aagcagtcag tatgtcatta tccttcaaca gaactctttc 1080
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 ttttaagtctt gagaggagaa aagcctctgt gaaagaaatc tttgttagca aggcataata 1260
 gcagagtcct ggtctgcaat aatattgatg atcacgactt gtgtgttact atataaaatt 1320
 caaccagtca aaattcaaca tctttaagaa tattgctact ttgggcaaaa tttgagtttc 1380
 attagagtaa aatcatttct gacatttcat aaagtttaat gcaaacaaaa atgattaat 1439

<210> 41

<211> 298

<212> DNA

<213> Homo sapien

<400> 41

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 ctgggctgca gatttgtttt gccctggcag agaaagagga gtctttgggg aggtgagctg 120
 tttcttgtga tttcaggcaa gaggcacata gaaactttgt atgagtgggg attttgtttt 180

aagtgctgga aaattagggc aggaattacg tgtttgcaag ttgtgccatc actggtttga 240
 atttgactgc ctcatcaagg ggcaagagtt attcttgaag atctcattct cccagaaa 298

<210> 42
 <211> 2023
 <212> DNA
 <213> Homo sapien

<400> 42
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 gttaaatgac aggttaagtt gagtacaaag ctttcccagt actgctgaga ttaagacaat 120
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<210> 43
 <211> 667
 <212> DNA
 <213> Homo sapien

<400> 43
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<210> 44
 <211> 495
 <212> DNA
 <213> Homo sapien

<220>

<221> misc_feature
 <222> (220)..(220)
 <223> a, c, g or t

<220>
 <221> misc_feature
 <222> (234)..(234)
 <223> a, c, g or t

<220>
 <221> misc_feature
 <222> (262)..(262)
 <223> a, c, g or t

<400> 44
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 atactttata taaatgtaat caatcaatat gcaatctttn gtgtcagctt cttntgctct 240
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 aaaaaaaaaa acgaa 495

<210> 45
 <211> 651
 <212> DNA
 <213> Homo sapien

<400> 45
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 atgaggtgat ctctctcatt gcggttttga ttcgcatttc cctaacggtt ggtgatactg 180
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<210> 46
 <211> 873
 <212> DNA
 <213> Homo sapien

<400> 46
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<210> 47
 <211> 213
 <212> DNA
 <213> Homo sapien

<400> 47
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 agttaggggg aagacgggat ggggaataaa cctcggaaa tctctgcaca ccaactcttg 180
 tgctatgctt ttaattctgt ttccctttct cct 213

<210> 48
 <211> 658
 <212> DNA
 <213> Homo sapien

<400> 48
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 aggggaaggag acgattggag tcaactcaat gtgctcaaaa aaagaagagt cggggacctc 120
 ctagccagtt acattccaga ggatgaggcg ctgatgcttc gggatggacg ctttgcttgt 180
 gccatctgcc cccatcgacc ggtactggac accctggcca tgctgactgc ccacogtgca 240
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 agaatgaatt gagaaggga gaaaccaaag ctgaggctcc tctgctaact cagacacgac 480
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<210> 49
 <211> 703
 <212> DNA
 <213> Homo sapien

<220>
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 <222> (169)..(169)
 <223> a, c, g or t

<400> 49
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 gtttctttat acataaaaaa tagatatctc tgtttccatt ttttaataca attctgtcct 360
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 atcctttotta ctagaactta gtattaatat taatgcgaca gctgggtatc atgtcatagc 660
 tgttccgggtg aatgtatcgt caaaaaaaaa aaaaaaaaaa aaa 703

<210> 50
 <211> 1251
 <212> DNA
 <213> Homo sapien

<400> 50
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 gctactcagg aggctgaagt gagaggatca cttgaactgg gaggcagagg ttgcagtгаа 300
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 aataaataaa caattcagtg gttcctagta cattcaaaca gttatacaac tatcaccact 420
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 acaactatth ttgtctcaaa catgtttctt tatacataaa aaatagatat ttctgtttcc 720
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<210> 51
 <211> 402
 <212> DNA

<213> Homo sapien

<400> 51

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 ggttggtggt gggtattcgg tggctctagg gcgtgttccc tgtgtgtgtg gaatgtgggt 360
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<210> 52

<211> 1042

<212> DNA

<213> Homo sapien

<400> 52

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<210> 53
 <211> 240
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (44)..(44)
 <223> a, c, g or t

<400> 53
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 gaatcgtggc tgggtgcctct tctccatgct catcccatac ccagtgaca ggataccgtt 180
 ccctgaagtt taaaaacatg caccacactt ccggtaaagg ctggagccac agaggcacct 240

<210> 54
 <211> 1590
 <212> DNA
 <213> Homo sapien

<400> 54
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<210> 55
 <211> 467
 <212> DNA
 <213> Homo sapien

<400> 55
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<210> 56
 <211> 2970
 <212> DNA
 <213> Homo sapien

<400> 56
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<210> 57

<211> 461

<212> DNA

<213> Homo sapien

<400> 57

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 <211> 1032
 <212> DNA
 <213> Homo sapien

<400> 58
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 <213> Homo sapien

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 <211> 666
 <212> DNA
 <213> Homo sapien

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<210> 61
 <211> 1098
 <212> DNA
 <213> Homo sapien

<400> 61
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 <213> Homo sapien

<400> 62
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 <211> 1685
 <212> DNA
 <213> Homo sapien

<400> 63
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<211> 327
<212> DNA
<213> Homo sapien

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<210> 65
<211> 5859
<212> DNA
<213> Homo sapien

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attaaaagtt ggccgtcccc aggcctcccc gcgcaaatct aaagagacag ggctttgctg	4920
aaaaccaaac atggggccagc tgggcttttt aacaacctag agactttccg gagctgcctg	4980
gaacagagcc tgtgggaaac ggggcttgcc agagacactc acagtttcct tcatggcctg	5040
ttttggtccc ctaagaatct ccacatcatt gtctttcttg tgcttttcc ttggtgagca	5100
acagaaaggg aagggttcca agcctctaaa aatgtgcttt gtgatcagga gtgcgctcca	5160
aaccaaatac gcgcgctgcc ctttcgaggc cagtgaagtc agcctccaag gctttaagc	5220
cacatttcag caagagaaag cgctgagagc tcgcaggttc attaaagaag gcaaagcact	5280
ggtttctctc cttagaaaag taggtttctt ggcttgatgt agactggctt gctttgattt	5340
ttagtgaagg gaatgtacgt aaaacaaaat agggcttggc tgggtcaaagg agacaagcag	5400
gatggatgga tggatggatg aatagataga tgggtgtttgc atgtaaattg cagagaaaac	5460
aaaaccaaag ctgattggaa acaattaatt gtgggtgtct gagggggaag gtcgcagctt	5520
tgggcagctt tgagaagcgg tacaagagct ctgtgcctgt gtgtccagcc ctggagccag	5580
ccagtgcatt tattttaagc tcttagaagc aactccttgg ccaggaatg cgtgaccct	5640

48

gagatggggtc cacgcatctc tctacacgtc cttctctccg tgggatactg gactcgtgcc 5700
 tctgcgcccc ttctcttctc acgcatatcc atgagcttta atttcacttt ctgatcacgg 5760
 tacgtccata aagccagtat tacacttaaa tgaagtattc ttttttgtaa tcgttttttt 5820
 tagaaggtaa acaaatttaa taaagctacc aataatgtt 5859

<210> 66
 <211> 93
 <212> PRT
 <213> Homo sapien

<400> 66

Met Gly Gly Asn Val Gly Arg Glu Thr Asn Val Pro Pro Gly Ala Ser
 1 5 10 15

Phe Gly Pro Trp Val Pro Pro Ala Phe Phe Phe Phe Cys Phe Phe Val
 20 25 30

Phe Phe Phe Lys Arg Arg Ile Leu Gly Phe Phe Gly Glu Thr Lys Ala
 35 40 45

Asp Ile Lys Ser Tyr Lys Asp Phe Arg Phe Ser Phe Thr Lys Lys Val
 50 55 60

Ile His Ile Leu His Tyr Thr Arg Tyr Asp Ile Asn Thr Gly Lys Tyr
 65 70 75 80

Tyr Val His Cys Lys Glu Lys Gly Lys Ile Glu Thr Tyr
 85 90

<210> 67
 <211> 59
 <212> PRT
 <213> Homo sapien

<400> 67

Met Gly Lys Lys Ala His Arg His Leu Gln Phe Thr Ser Phe Lys Phe
 1 5 10 15

Leu Lys Lys Thr Pro Gln Lys Lys Pro Phe Leu Pro Gly Lys Ala His
 20 25 30

Glu Ile Asn Tyr Arg Ile Glu Leu Tyr Asn Ser Thr Ser Thr Ser Leu
 35 40 45

Thr Leu Met Cys Phe Ala Lys Asn Leu Glu Lys
50 55

<210> 68
<211> 59
<212> PRT
<213> Homo sapien

<400> 68

Met Ser Ile Tyr Ser Phe Ile Leu Val Lys Asn Ile Arg Gln Ser Arg
1 5 10 15

Gly Arg Phe Lys Ser Glu Lys Lys Lys Lys Lys Lys Lys Ser Ala
20 25 30

Gly Gly Thr Ser Gly Pro Lys Gly Ser Arg Gly Glu Leu Val Ser Arg
35 40 45

Pro Lys Phe Pro Pro Asn Phe Pro Pro Lys Gly
50 55

<210> 69
<211> 55
<212> PRT
<213> Homo sapien

<400> 69

Met Thr Ile Leu Asn Tyr Ser Ile Asn Met Arg Cys Trp Leu Lys Ser
1 5 10 15

Phe Ser Arg Leu Leu Met Ser Thr Ser Val Leu Val Phe Leu Gly Thr
20 25 30

Ser Tyr Phe Tyr Leu Gly Phe Trp Pro Tyr Leu Ser Ser Ile Thr Ser
35 40 45

Pro Glu Thr Ser His Gly Asn
50 55

<210> 70
<211> 69
<212> PRT
<213> Homo sapien

<400> 70

Met Ser Val Phe Phe Cys Val Lys Thr Pro Asp Thr Lys Thr Thr His
1 5 10 15

Pro Tyr Ser Thr Pro Cys Ser Ala Leu Leu Asn Ser Asn Ala His Met
35 40 45

Ala Pro
50

<210> 73
<211> 74
<212> PRT
<213> Homo sapien

<400> 73

Met Lys Gln Arg Ile Ser Lys Glu Thr Thr Lys Asp Ile Gly Asn Ser
1 5 10 15

Gln Lys Pro His Ala Asp Ala Glu Leu Gly Val Lys Asp Cys His Thr
20 25 30

Val Ser Asn Cys Arg Gly Val Cys His Ile Asp Ala Phe His Thr Leu
35 40 45

Glu Val Ala Arg Ala Ser Trp Val Thr Leu Pro Gln Arg Lys Asp Arg
50 55 60

Cys Val Pro Gly Gln Cys Arg Gly Glu Met
65 70

<210> 74
<211> 133
<212> PRT
<213> Homo sapien

<400> 74

Met Lys Ser Gln Glu Arg Met Asn Ser Cys Asp Gln Leu Gln Lys Thr
1 5 10 15

Gln Ala Asp Ser Ile Leu Arg Asp Thr Leu Tyr His Phe Gly Arg Ser
20 25 30

Pro Thr His Leu Gly Lys Thr Gly Met Ser Leu Arg Gly Ser Gly Arg
35 40 45

Ser Ser Arg Trp Leu Thr Val Val Gly Ala Ala Val Val Ala Val Val
50 55 60

Ala Ala Asp Ser Gly Phe Ser Ile Arg Gly Phe Ile Ile Ser Arg Thr
65 70 75 80

Ser Ser Trp Ile Arg Val Ser Trp Ile Ser Cys Tyr Ser Asp Leu Trp
85 90 95

Ala Glu Thr Thr Asn Asp Gly Thr Pro Gln Ser Thr Ser Pro Thr Ser
100 105 110

Ala Ile His Thr Leu Ala Pro Arg Arg His Asp Leu Glu Ala His Arg
115 120 125

Leu Ser Gly Tyr His
130

<210> 75
<211> 72
<212> PRT
<213> Homo sapien

<400> 75

Met Trp Ser Val Ser Pro Cys Ser Leu Pro Glu Gln Cys Leu Arg Phe
1 5 10 15

Glu Trp Asp Pro Thr Phe Val Asn Glu Ile Tyr His Leu Pro Arg Gln
20 25 30

Asn Asn Arg Phe Cys Pro Arg Cys Cys Asp Val Thr Met Val Ala Ile
35 40 45

Thr Ala Ile Thr Tyr Asn Tyr Trp His Thr Tyr Asp Glu Ser Arg Thr
50 55 60

Gly Pro Lys Cys Phe Leu Thr Met
65 70

<210> 76
<211> 93
<212> PRT
<213> Homo sapien

<400> 76

Met Ser Leu Cys Cys Asp Gly Pro Phe Pro Ser Leu Phe Gly Tyr Pro
1 5 10 15

Pro Leu Thr Ile Leu Ile His Val Leu Phe Gln Lys Val Ser Pro Ile
20 25 30

Lys Trp His Leu Gly Thr Thr Met Ala Gly Ile Ala Leu Ala Met Asn

35

40

45

Ser Thr Val Val Thr Leu Ser His Ser Arg Ala Val His Phe Ile Met
50 55 60

Asn Asp Leu Arg Ile Ser Pro Gly Lys Ser Pro Arg Gln Ala Leu Pro
65 70 75 80

Leu Leu Leu Ala Leu Gln Cys Glu Val Ser Trp Glu Arg
85 90

<210> 77

<211> 500

<212> PRT

<213> Homo sapien

<400> 77

Met Lys Cys Thr Ala Arg Glu Trp Leu Arg Val Thr Thr Val Leu Phe
1 5 10 15

Met Ala Arg Ala Ile Pro Ala Met Val Val Pro Asn Ala Thr Leu Leu
20 25 30

Glu Lys Leu Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu Trp Trp Ile
35 40 45

Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn Asp Met Gln Ser
50 55 60

Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln Val Tyr Pro Thr Ala
65 70 75 80

Ser Asn Met Glu Tyr Met Thr Trp Asp Val Glu Leu Glu Arg Ser Ala
85 90 95

Glu Ser Trp Ala Glu Ser Cys Leu Trp Glu His Gly Pro Ala Ser Leu
100 105 110

Leu Pro Ser Ile Gly Gln Asn Leu Gly Ala His Trp Gly Arg Tyr Arg
115 120 125

Pro Pro Thr Phe His Val Gln Ser Trp Tyr Asp Glu Val Lys Asp Phe
130 135 140

Ser Tyr Pro Tyr Glu His Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys

145		150		155		160
Ser Gly Pro Val Cys Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser						
	165			170		175
Asn Arg Ile Gly Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp						
	180			185		190
Gly Gln Ile Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro						
	195			200		205
Lys Gly Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys						
	210			215		220
Ser Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys						
	225			230		235
Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu Thr						
	245			250		255
Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His Val Arg						
	260			265		270
Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser Ala Gln Gln						
	275			280		285
Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg Asp Gln Cys Lys						
	290			295		300
Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala Gly Cys Leu Asp Ser						
	305			310		315
Lys Ala Lys Val Ile Gly Ser Val His Tyr Glu Met Gln Ser Ser Ile						
	325			330		335
Cys Arg Ala Ala Ile His Tyr Gly Ile Ile Asp Asn Asp Gly Gly Trp						
	340			345		350
Val Asp Ile Thr Arg Gln Gly Arg Lys His Tyr Phe Ile Lys Ser Asn						
	355			360		365
Arg Asn Gly Ile Gln Thr Ile Gly Lys Tyr Gln Ser Ala Asn Ser Phe						
	370			375		380

Thr Val Ser Lys Val Thr Val Gln Ala Val Thr Cys Glu Thr Thr Val
385 390 395 400

Glu Gln Leu Cys Pro Phe His Lys Pro Ala Ser His Cys Pro Arg Val
405 410 415

Tyr Cys Pro Arg Asn Cys Met Gln Ala Asn Pro His Tyr Ala Arg Val
420 425 430

Ile Gly Thr Arg Val Tyr Ser Asp Leu Ser Ser Ile Cys Arg Ala Ala
435 440 445

Val His Ala Gly Val Val Arg Asn His Gly Gly Tyr Val Asp Val Met
450 455 460

Pro Val Asp Lys Arg Lys Thr Tyr Ile Ala Ser Phe Gln Asn Gly Ile
465 470 475 480

Phe Ser Glu Ser Leu Gln Asn Pro Pro Gly Gly Lys Ala Phe Arg Val
485 490 495

Phe Ala Val Val
500

<210> 78
<211> 51
<212> PRT
<213> Homo sapien

<400> 78

Met Val Thr Thr Gln Asn Leu Arg Leu Thr Ile Val Glu Val Arg Gly
1 5 10 15

Gln Gly Ala Gly Arg Ala Gly Ser Phe Leu Ser Ser Ile Met Gly Ala
20 25 30

Ala Gly Arg Ile Gln Phe Leu Ala Gly Leu Gly Arg Arg Ser Pro Val
35 40 45

Pro Ala Ala
50

<210> 79
<211> 50
<212> PRT
<213> Homo sapien

<400> 79

Met Val Phe Tyr Tyr Tyr Tyr Tyr Gly Phe Lys Lys Ser Asn Phe Ile
1 5 10 15

Ser Phe Cys Lys Glu Leu Ser Asn Ile Leu Tyr Arg Phe Cys Glu Arg
20 25 30

Thr Tyr Phe Leu Thr Val Ile Phe Ile Ser Phe Lys Ile Phe Val Ser
35 40 45

His Leu
50

<210> 80

<211> 229

<212> PRT

<213> Homo sapien

<400> 80

Met Ala Glu Glu Met Glu Ser Ser Leu Glu Ala Ser Phe Ser Ser Ser
1 5 10 15

Gly Ala Val Ser Gly Ala Ser Gly Phe Leu Pro Pro Ala Arg Ser Arg
20 25 30

Ile Phe Lys Ile Ile Val Ile Gly Asp Ser Asn Val Gly Lys Thr Cys
35 40 45

Leu Thr Tyr Arg Phe Cys Ala Gly Arg Phe Pro Asp Arg Thr Glu Ala
50 55 60

Thr Ile Gly Val Asp Phe Arg Glu Arg Ala Val Glu Ile Asp Gly Glu
65 70 75 80

Arg Ile Lys Ile Gln Leu Trp Asp Thr Ala Gly Gln Glu Arg Phe Arg
85 90 95

Lys Ser Met Val Gln His Tyr Tyr Arg Asn Val His Ala Val Val Phe
100 105 110

Val Tyr Asp Met Thr Asn Met Ala Ser Phe His Ser Leu Pro Ser Trp
115 120 125

Ile Glu Glu Cys Lys Gln His Leu Leu Ala Asn Asp Ile Pro Arg Ile

130

135

140

Leu Val Gly Asn Lys Cys Asp Leu Arg Ser Ala Ile Gln Val Pro Thr
 145 150 155 160

Asp Leu Ala Gln Lys Phe Ala Asp Thr His Ser Met Pro Leu Phe Glu
 165 170 175

Thr Ser Ala Lys Asn Pro Asn Asp Asn Asp His Val Glu Ala Ile Phe
 180 185 190

Met Thr Leu Ala His Lys Leu Lys Ser His Lys Pro Leu Met Leu Ser
 195 200 205

Gln Pro Pro Asp Asn Gly Ile Ile Leu Lys Pro Glu Pro Lys Pro Ala
 210 215 220

Met Thr Cys Trp Cys
 225

<210> 81
 <211> 42
 <212> PRT
 <213> Homo sapien

<400> 81

Met Asn Val Phe Lys Ile Tyr Asn Arg Thr Gln Ser Gly Arg Val Phe
 1 5 10 15

Phe Gly Gly Arg Gly Leu Phe Ser Asn Ser Arg Trp His Ile Ser Gly
 20 25 30

Gln Gln Tyr Phe Leu Thr His Ser Asn Gln
 35 40

<210> 82
 <211> 56
 <212> PRT
 <213> Homo sapien

<400> 82

Met Tyr Leu Lys Glu Lys Tyr Pro Asp Leu Lys Pro Thr Ala Asp Val
 1 5 10 15

Ala Asn Phe His Thr Thr Ala Gly His Gly Ser Leu Leu Thr Thr His
 20 25 30

Cys His Leu Arg Leu Cys Leu Cys Phe Ile Gln Arg Glu Arg Gly Gly
 35 40 45

Leu Lys Gly Met Leu Pro Gly Gly
 50 55

<210> 83
 <211> 72
 <212> PRT
 <213> Homo sapien

<400> 83

Met Leu Ser Pro Phe Leu Leu Ile Asn Asn Leu Tyr Tyr Lys Lys Lys
 1 5 10 15

Lys Lys Lys Lys Lys Arg Arg Gly Gly Asn Gln Gly Pro Ile Arg Gly
 20 25 30

Phe Pro Gly Gly Glu Trp Val Thr Arg Ser Gln Phe His Thr Phe Ala
 35 40 45

Arg Gln Gln Thr Gly Glu Glu Ala Gly Pro Arg Arg Glu Ala Arg Gln
 50 55 60

Glu Gln Ala His Arg Glu Thr Glu
 65 70

<210> 84
 <211> 27
 <212> PRT
 <213> Homo sapien

<400> 84

Met His Val Glu Arg Arg Ser Val Met Asp Ala Trp Ser Arg Arg Gly
 1 5 10 15

Ala Gly Lys Tyr Thr Asp Ile Lys Asp Gln Ile
 20 25

<210> 85
 <211> 292
 <212> PRT
 <213> Homo sapien

<400> 85

Met Asn Arg Phe Gly Thr Arg Leu Val Gly Ala Thr Ala Thr Ser Ser
 1 5 10 15

Pro Pro Pro Lys Ala Arg Ser Asn Glu Asn Leu Asp Lys Ile Asp Met
 20 25 30

Ser Leu Asp Asp Ile Ile Lys Leu Asn Arg Lys Glu Gly Lys Lys Gln
 35 40 45

Asn Phe Pro Arg Leu Asn Arg Arg Leu Leu Gln Gln Ser Gly Ala Gln
 50 55 60

Gln Phe Arg Met Arg Val Arg Trp Gly Ile Gln Gln Asn Ser Gly Phe
 65 70 75 80

Gly Lys Thr Ser Leu Asn Arg Arg Gly Arg Val Met Pro Gly Lys Arg
 85 90 95

Arg Pro Asn Gly Val Ile Thr Gly Leu Ala Ala Arg Lys Thr Thr Gly
 100 105 110

Ile Arg Lys Gly Ile Ser Pro Met Asn Arg Pro Pro Leu Ser Asp Lys
 115 120 125

Asn Ile Glu Gln Tyr Phe Pro Val Leu Lys Arg Lys Ala Asn Leu Leu
 130 135 140

Arg Gln Asn Glu Gly Gln Arg Lys Pro Val Ala Val Leu Lys Arg Pro
 145 150 155 160

Ser Gln Leu Ser Arg Lys Asn Asn Ile Pro Ala Asn Phe Thr Arg Ser
 165 170 175

Gly Asn Lys Leu Asn His Gln Lys Asp Thr Arg Gln Ala Thr Phe Leu
 180 185 190

Phe Arg Arg Gly Leu Lys Val Gln Ala Gln Leu Asn Thr Glu Gln Leu
 195 200 205

Leu Asp Asp Val Val Ala Lys Arg Thr Arg Gln Trp Arg Thr Ser Thr
 210 215 220

Thr Asn Gly Gly Ile Leu Thr Val Ser Ile Asp Asn Pro Gly Ala Val
 225 230 235 240

Gln Cys Pro Val Thr Gln Lys Pro Arg Leu Thr Arg Thr Ala Val Pro
 245 250 255

Ser Phe Leu Thr Lys Arg Glu Gln Ser Asp Val Lys Lys Val Pro Lys
 260 265 270

Gly Val Pro Leu Gln Phe Asp Ile Asn Ser Val Gly Lys Gln Thr Arg
 275 280 285

Ile Thr Leu Lys
 290

<210> 86
 <211> 34
 <212> PRT
 <213> Homo sapien

<400> 86

Met Val Phe Lys Glu Leu Ser Val Leu Pro Arg Cys Phe Trp Gly Ser
 1 5 10 15

Pro Val Phe His Ser Val Ile Pro Phe Lys Arg Leu Ser Lys Ser Leu
 20 25 30

Phe Asn

<210> 87
 <211> 26
 <212> PRT
 <213> Homo sapien

<400> 87

Met His Thr Phe Thr Gly Lys His Asn Ser Phe Ser Leu Arg Lys Asn
 1 5 10 15

Ala Glu Tyr Leu Leu Gln Leu Arg Lys Ile
 20 25

<210> 88
 <211> 129
 <212> PRT
 <213> Homo sapien

<400> 88

His Met Phe Glu Asp Phe Ser Phe Pro Phe Ala Ile Phe Leu Phe Phe

61

1 5 10 15

Leu Arg Arg Arg Ser Ala Leu Thr Pro Arg Leu Glu Ala Ser Gly Ala
20 25 30

Ile Leu Ala Tyr Cys Asn Leu His Pro Pro Gly Ser Ser Asp Ser Pro
35 40 45

Ala Ser Ala Ser Gly Val Ala Gly Ile Thr Gly Ala Arg His His Val
50 55 60

Arg Leu Ile Phe Val Phe Ser Val Glu Thr Gly Phe Cys Tyr Val Gly
65 70 75 80

Gln Ala Gly Leu Lys Leu Leu Thr Ser Ser Asp Pro Pro Ala Ser Ala
85 90 95

Ser Gln Ser Val Arg Ile Thr Gly Val Ser His Arg Ala Arg Leu Lys
100 105 110

Ile Phe Leu Asn Cys Asn Lys Tyr Ser Ala Phe Phe Glu Ser Leu Tyr
115 120 125

Leu

<210> 89
<211> 15
<212> PRT
<213> Homo sapien
<400> 89

Met Ala Thr Leu Ala Gly Tyr Phe Leu Ala Lys Phe Leu Leu Arg
1 5 10 15

<210> 90
<211> 71
<212> PRT
<213> Homo sapien
<400> 90

Met Lys His Gly Ser Phe Tyr Phe Thr Val Ser Asn Leu Ile Ala Ser
1 5 10 15

His Leu Lys Ser Ala Lys Ile Glu Leu Pro Lys Lys Cys Tyr Met Pro
20 25 30

Lys Gly Ala His Asn Tyr Leu Met Ala Lys Leu Ile Lys Leu Thr Ser
 35 40 45

Pro Lys Ser Asp Ser Arg Asp Leu Leu Cys Pro Ser Leu Trp Cys Phe
 50 55 60

Phe Ala Leu His Ile Cys Phe
 65 70

<210> 91
 <211> 35
 <212> PRT
 <213> Homo sapien

<400> 91

Met Leu Ala Arg Leu Leu Leu Met Ile Lys Ser Leu Asp Pro His Thr
 1 5 10 15

Arg Phe Ala Met Val Thr Leu Ser Arg Thr Glu Ile Pro Leu Val Leu
 20 25 30

Tyr Lys Arg
 35

<210> 92
 <211> 48
 <212> PRT
 <213> Homo sapien

<400> 92

Met Phe Thr Ser Thr Thr Leu Asn Gln Leu Leu Ser Ile Leu Tyr Ile
 1 5 10 15

Phe Tyr Ser Ile Phe Phe Ser Asn Phe Leu His Phe Pro Met Ser Leu
 20 25 30

Lys Phe Ser Val Asn Val Asn Phe Lys Asn Cys Thr Val Trp Leu Phe
 35 40 45

<210> 93
 <211> 67
 <212> PRT
 <213> Homo sapien

<400> 93

Met Cys Met Ser Arg Phe Glu Ser Leu Gly Cys Arg Phe Val Leu Pro
1 5 10 15

Trp Gln Arg Lys Arg Ser Leu Trp Gly Gly Glu Leu Phe Leu Val Ile
20 25 30

Ser Gly Lys Arg His Ile Glu Thr Leu Tyr Glu Trp Gly Phe Cys Phe
35 40 45

Lys Cys Trp Lys Ile Arg Ala Gly Ile Thr Cys Leu Gln Val Val Pro
50 55 60

Ser Leu Val
65

<210> 94
<211> 145
<212> PRT
<213> Homo sapien

<400> 94

Met Leu Pro Ala Gly Thr Leu Val Gly Ala Gly Leu Gly Val Pro His
1 5 10 15

Pro Gln Thr Pro Cys Phe Leu Gln Gly His Trp Trp Val Leu Ala Trp
20 25 30

Gly Phe Leu Thr His Lys His His Ala Ser Cys Arg Asp Val Asp Gly
35 40 45

Arg Trp Pro Gly Arg Ser Ser His Thr Thr Ala Met Leu Pro Ala Gly
50 55 60

Thr Leu Val Gly Ala Gly Leu Gly Leu Pro His Ile Gln Thr Pro Cys
65 70 75 80

Phe Leu Gln Gly Arg Trp Cys Ala Leu Ala Trp Gly Phe Leu Thr Tyr
85 90 95

Lys Pro His Ala Ser Tyr Arg Ala Arg Trp Trp Thr Ala Gly Pro Glu
100 105 110

Ala Ser Ser His Thr Ile Ala Ile Leu Pro His Gly Thr Leu Ala Ala
115 120 125

Arg Thr Gly Leu Gly Leu Pro His Pro Gln Thr Pro Cys Leu Pro Ile
 130 135 140

Asp
 145

<210> 95
 <211> 48
 <212> PRT
 <213> Homo sapien

<400> 95

Met Gly Val Tyr Ser Gly Ala Gln Asn Ile Pro Thr His Asn Thr Ile
 1 5 10 15

Ser Ser Gly Thr Ala Lys Lys Gly Glu Asn Arg Lys Gln Glu Asn Arg
 20 25 30

Lys Lys Lys Arg Lys Lys Lys Lys Asn Arg Lys Lys Lys Lys Asn Glu
 35 40 45

<210> 96
 <211> 71
 <212> PRT
 <213> Homo sapien

<400> 96

Met Ala Gly Gly Ala Lys Glu Leu Pro Arg Ala Ser Phe Ile Arg Ala
 1 5 10 15

Leu Ile Leu Cys Lys Arg Ala Glu Ser Ser Gly Pro Asn Arg Phe Pro
 20 25 30

Lys Leu Leu Thr Leu Gly Met Arg Val Gln Tyr Thr Asn Phe Trp Gly
 35 40 45

Thr Gln Thr Phe Arg Pro Gln Gln Tyr Pro Asn Tyr Ile Arg Asp Leu
 50 55 60

Lys Ser Thr Thr Lys Asn Lys
 65 70

<210> 97
 <211> 291
 <212> PRT
 <213> Homo sapien

<400> 97

Met Leu Arg Arg Glu Ala Arg Leu Arg Arg Glu Tyr Leu Tyr Arg Lys
 1 5 10 15

Ala Arg Glu Glu Ala Gln Arg Ser Ala Gln Glu Arg Lys Glu Arg Leu
 20 25 30

Arg Arg Ala Leu Glu Glu Asn Arg Leu Ile Pro Thr Glu Leu Arg Arg
 35 40 45

Glu Ala Leu Ala Leu Gln Gly Ser Leu Glu Phe Asp Asp Ala Gly Gly
 50 55 60

Glu Gly Val Thr Ser His Val Asp Asp Glu Tyr Arg Trp Ala Gly Val
 65 70 75 80

Glu Asp Pro Lys Val Met Ile Thr Thr Ser Arg Asp Pro Ser Ser Arg
 85 90 95

Leu Lys Met Phe Ala Lys Glu Leu Lys Leu Val Phe Pro Gly Ala Gln
 100 105 110

Arg Met Asn Arg Gly Arg His Glu Val Gly Ala Leu Val Arg Ala Cys
 115 120 125

Lys Ala Asn Gly Val Thr Asp Leu Leu Val Val His Glu His Arg Gly
 130 135 140

Thr Pro Val Gly Leu Ile Val Ser His Leu Pro Phe Gly Pro Thr Ala
 145 150 155 160

Tyr Phe Thr Leu Cys Asn Val Val Met Arg His Asp Ile Pro Asp Leu
 165 170 175

Gly Thr Met Ser Glu Ala Lys Pro His Leu Ile Thr His Gly Phe Ser
 180 185 190

Ser Arg Leu Gly Lys Arg Val Ser Asp Ile Leu Arg Tyr Leu Phe Pro
 195 200 205

Val Pro Lys Asp Asp Ser His Arg Val Ile Thr Phe Ala Asn Gln Asp
 210 215 220

Asp Tyr Ile Ser Phe Arg His His Val Tyr Lys Lys Thr Asp His Arg

[illegible]

Gly Lys Lys His Leu Ser Ser Lys Leu Gly Gly Arg Arg Asp Gly Glu
65 70 75 80

Ala Thr Leu Glu Ile Ser Ala His His Ser Trp Cys Tyr Ala Phe Asn
85 90 95

Ser Val Ser Leu Ser Pro Gln Ala Leu Gln Leu Phe Tyr Gly Lys Lys
100 105 110

Gln Pro Gly Lys Glu Arg Lys Gln Asn Pro Lys His Gln Asn Glu Leu
115 120 125

Arg Arg Glu Glu Thr Lys Ala Glu Ala Pro Leu Leu Thr Gln Thr Arg
130 135 140

Leu Ile Thr Gln Ser Ala Leu His Arg Ala Pro His Tyr Asn Ser Cys
145 150 155 160

Cys Arg Arg Lys Tyr Arg Tyr Gly Thr Gly Lys Pro Glu Val
165 170

<210> 100
<211> 50
<212> PRT
<213> Homo sapien

<400> 100

Met Lys Tyr Pro Phe Ile Tyr Asn Tyr Phe Cys Leu Lys His Val Ser
1 5 10 15

Leu Tyr Ile Lys Asn Arg Tyr Phe Cys Phe His Phe Leu Ile Lys Phe
20 25 30

Cys Pro Tyr Phe Arg Ser Glu Lys Asn Gln Tyr Ser Asn Ile Lys Lys
35 40 45

Gln Glu
50

<210> 101
<211> 18
<212> PRT
<213> Homo sapien

<400> 101

Met Glu Glu Ile Tyr Leu Val Thr Gly Lys Leu Val Ile Gln Ala Leu
 1 5 10 15

Glu Gly

<210> 102
 <211> 34
 <212> PRT
 <213> Homo sapien

<400> 102

Met Ser Ser Gln Asn Arg Arg Cys Leu Gly Arg Asn Arg Gly Trp Cys
 1 5 10 15

Leu Phe Ser Met Leu Ile Pro Tyr Pro Ser Asp Arg Ile Pro Phe Pro
 20 25 30

Glu Val

<210> 103
 <211> 40
 <212> PRT
 <213> Homo sapien

<400> 103

Met Asn Lys Gln Ile Tyr Cys Ser Ser Leu Lys Lys Phe Phe Phe Lys
 1 5 10 15

Gln Ser His Ser Val Ala Gln Ala Gly Val Lys Gln Cys Asp Leu Ser
 20 25 30

Ser Leu Gln Pro Pro Pro Pro Glu
 35 40

<210> 104
 <211> 990
 <212> PRT
 <213> Homo sapien

<400> 104

Met Ser Glu Glu Thr Arg Gln Ser Lys Leu Ala Ala Ala Lys Lys Lys
 1 5 10 15

Leu Arg Glu Tyr Gln Gln Arg Asn Ser Pro Gly Val Pro Thr Gly Ala

[illegible]

Glu Arg Ala Leu Ser Ala Val Ser Thr Gln Gln Lys Lys Ala Asp Arg
 260 265 270

Tyr Asn Lys Glu Leu Thr Lys Glu Arg Asp Ala Leu Arg Leu Glu Leu
 275 280 285

Tyr Lys Asn Thr Gln Ser Asn Glu Asp Leu Lys Gln Glu Lys Ser Glu
 290 295 300

Leu Glu Glu Lys Leu Arg Val Leu Val Thr Glu Lys Ala Gly Met Gln
 305 310 315 320

Leu Asn Leu Glu Glu Leu Gln Lys Lys Leu Glu Met Thr Glu Leu Leu
 325 330 335

Leu Gln Gln Phe Ser Ser Arg Cys Glu Ala Pro Asp Ala Asn Gln Gln
 340 345 350

Leu Gln Gln Ala Met Glu Glu Arg Ala Gln Leu Glu Ala His Leu Gly
 355 360 365

Gln Val Met Glu Ser Val Arg Gln Leu Gln Met Glu Arg Asp Lys Tyr
 370 375 380

Ala Glu Asn Leu Lys Gly Glu Ser Ala Met Trp Arg Gln Arg Met Gln
 385 390 395 400

Gln Met Ser Glu Gln Val His Thr Leu Arg Glu Glu Lys Glu Cys Ser
 405 410 415

Met Ser Arg Val Gln Glu Leu Glu Thr Ser Leu Ala Glu Leu Arg Asn
 420 425 430

Gln Met Ala Glu Pro Pro Pro Pro Glu Pro Pro Ala Gly Pro Ser Glu
 435 440 445

Val Glu Gln Gln Leu Gln Ala Glu Ala Glu His Leu Arg Lys Glu Leu
 450 455 460

Glu Gly Leu Ala Gly Gln Leu Gln Ala Gln Val Gln Asp Asn Glu Gly
 465 470 475 480

Leu Ser Arg Leu Asn Arg Glu Gln Glu Glu Arg Leu Leu Glu Leu Glu
 485 490 495

Arg Ala Ala Glu Leu Trp Gly Glu Gln Ala Glu Ala Arg Arg Gln Ile
 500 505 510

Leu Glu Thr Met Gln Asn Asp Arg Thr Thr Ile Ser Arg Ala Leu Ser
 515 520 525

Gln Asn Arg Glu Leu Lys Glu Gln Leu Ala Glu Leu Gln Ser Gly Phe
 530 535 540

Val Lys Leu Thr Asn Glu Asn Met Glu Ile Thr Ser Ala Leu Gln Ser
 545 550 555 560

Glu Gln His Val Lys Arg Glu Leu Gly Lys Lys Leu Gly Glu Leu Gln
 565 570 575

Glu Lys Leu Ser Glu Leu Lys Glu Thr Val Glu Leu Lys Ser Gln Glu
 580 585 590

Ala Gln Ser Leu Gln Gln Gln Arg Asp Gln Tyr Leu Gly His Leu Gln
 595 600 605

Gln Tyr Val Ala Ala Tyr Gln Gln Leu Thr Ser Glu Lys Glu Val Leu
 610 615 620

His Asn Gln Leu Leu Leu Gln Thr Gln Leu Val Asp Gln Leu Gln Gln
 625 630 635 640

Gln Glu Ala Gln Gly Lys Ala Val Ala Glu Met Ala Arg Gln Glu Leu
 645 650 655

Gln Glu Thr Gln Glu Arg Leu Glu Ala Ala Thr Gln Gln Asn Gln Gln
 660 665 670

Leu Arg Ala Gln Leu Ser Leu Met Ala His Pro Gly Glu Gly Asp Gly
 675 680 685

Leu Asp Arg Glu Glu Glu Glu Asp Glu Glu Glu Glu Glu Glu Ala
 690 695 700

Val Ala Val Pro Gln Pro Met Pro Ser Ile Pro Glu Asp Leu Glu Ser
 705 710 715 720

Arg Glu Ala Met Val Ala Phe Phe Asn Ser Ala Val Ala Ser Ala Glu
 725 730 735

Glu Glu Gln Ala Arg Leu Arg Gly Gln Leu Lys Glu Gln Arg Val Arg
740 745 750

Cys Arg Arg Leu Ala His Leu Leu Ala Ser Ala Gln Lys Glu Pro Glu
755 760 765

Ala Ala Ala Pro Ala Pro Gly Thr Gly Gly Asp Ser Val Cys Gly Glu
770 775 780

Thr His Arg Ala Leu Gln Gly Ala Met Glu Lys Leu Gln Ser Arg Phe
785 790 795 800

Met Glu Leu Met Gln Glu Lys Ala Asp Leu Lys Glu Arg Val Glu Glu
805 810 815

Leu Glu His Arg Cys Ile Gln Leu Ser Gly Glu Thr Asp Thr Ile Gly
820 825 830

Glu Tyr Ile Ala Leu Tyr Gln Ser Gln Arg Ala Val Leu Lys Glu Arg
835 840 845

His Arg Glu Lys Glu Glu Tyr Ile Ser Arg Leu Ala Gln Asp Lys Glu
850 855 860

Glu Met Lys Val Lys Leu Leu Glu Leu Gln Glu Leu Val Leu Arg Leu
865 870 875 880

Val Gly Asp Arg Asn Glu Trp His Gly Arg Phe Leu Ala Ala Ala Gln
885 890 895

Asn Pro Ala Asp Glu Pro Thr Ser Gly Ala Pro Ala Pro Gln Glu Leu
900 905 910

Gly Ala Ala Asn Gln Gln Gly Asp Leu Cys Glu Val Ser Leu Ala Gly
915 920 925

Ser Val Glu Pro Ala Gln Gly Glu Ala Arg Glu Gly Ser Pro Arg Asp
930 935 940

Asn Pro Thr Ala Gln Gln Ile Met Gln Leu Leu Arg Glu Met Gln Asn
945 950 955 960

Pro Arg Glu Arg Pro Gly Leu Gly Ser Asn Pro Cys Ile Pro Phe Phe

Leu Gln Glu Ala Trp Gln Leu Tyr Val Arg Lys Pro Arg Pro Ala Pro
50 55 60

Thr Ser Val Pro Ala Gly Gln Ala Trp Thr Val Asn Gly
65 70 75

<210> 107
<211> 116
<212> PRT
<213> Homo sapien

<400> 107

Met Arg Gly Thr Pro Phe Leu Ser Cys Val Ala Cys Leu Val Cys Ala
1 5 10 15

Ser Thr Leu Leu Phe Leu Ser Leu Ser Ser Leu Lys Met Tyr Asn Lys
20 25 30

Ile Ser Phe Leu Ala Pro Arg Leu Ser Pro Pro Gln Asn Lys Lys Lys
35 40 45

Lys Lys Lys Lys Lys Asn Pro Phe Phe Phe Phe Phe Phe Phe Leu
50 55 60

Phe Phe Phe Phe Phe Phe Phe Ala His Asn Lys Asn Leu Leu Gly Glu
65 70 75 80

Arg Trp Leu Met Gly Gly Lys Ile Trp Ile Gln Glu Ser Ser Ile Leu
85 90 95

Ala Leu Ala Leu Ser Pro Asn Pro Pro Ser Leu Pro Glu Pro Arg Gly
100 105 110

Val Ser Pro Cys
115

<210> 108
<211> 46
<212> PRT
<213> Homo sapien

<400> 108

Met Val Thr Leu Leu Phe Ser Glu Pro Leu Leu Arg Ala Ser Gln Asp
1 5 10 15

Ile Met Arg Thr Asp Asn Leu Pro Trp Ser Gln Arg Pro Ser Leu Pro
20 25 30

Gly His Thr Leu Arg Arg Val Ala Val Gln Arg Arg Pro Arg Leu Ser
85 90 95

Ser Leu Pro Arg Gly Pro Gly Ser Trp Trp Thr Ser Thr Glu Ser Leu
 100 105 110

Cys Ser Asn Ala Ser Gly Asp Ser Arg His Ser Ala Tyr Ser Tyr Cys
 115 120 125

Gly Arg Gly Phe Tyr Pro Gln Tyr Gly Ala Leu Glu Thr Arg Gly Gly
 130 135 140

Phe Asn Pro Arg Val Glu Arg Thr Leu Leu Asp Ala Arg Arg Arg Leu
 145 150 155 160

Glu Asp Gln Ala Ala Thr Pro Thr Gly Leu Gly Ser Leu Thr Pro Ser
 165 170 175

Ala Ala Gly Ser Thr Ala Ser Leu Val Gly Val Gly Leu Pro Pro Pro
 180 185 190

Thr Pro Arg Ser Ser Gly Leu Ser Thr Pro Val Pro Pro Ser Ala Gly
 195 200 205

His Leu Ala His Val Arg Glu Gln Met Ala Gly Ala Leu Arg Lys Leu
 210 215 220

Arg Gln Leu Glu Glu Gln Val Lys Leu Ile Pro Val Leu Gln Val Lys
 225 230 235 240

Leu Ser Val Leu Gln Glu Glu Lys Arg Gln Leu Thr Val Gln Leu Lys
 245 250 255

Ser Gln Lys Phe Leu Gly His Pro Thr Ala Gly Arg Gly Arg Ser Glu
 260 265 270

Leu Cys Leu Asp Leu Pro Asp Pro Pro Glu Asp Pro Val Ala Leu Glu
 275 280 285

Thr Arg Ser Val Gly Thr Trp Val Arg Glu Arg Asp Leu Gly Met Pro
 290 295 300

Asp Gly Glu Ala Ala Leu Ala Ala Lys Val Ala Val Leu Glu Thr Gln
 305 310 315 320

Leu Lys Lys Ala Leu Gln Glu Leu Gln Ala Ala Gln Ala Arg Gln Ala
 325 330 335

Asp Pro Gln Pro Gln Ala Trp Pro Pro Pro Asp Ser Pro Val Arg Val
340 345 350

Asp Thr Val Arg Val Val Glu Gly Pro Arg Glu Val Glu Val Val Ala
355 360 365

Ser Thr Ala Ala Gly Ala Pro Ala Gln Arg Ala Gln Ser Leu Glu Pro
370 375 380

Tyr Gly Thr Gly Leu Arg Ala Leu Ala Met Pro Gly Arg Pro Glu Ser
385 390 395 400

Pro Pro Val Phe Arg Ser Gln Glu Val Val Glu Thr Met Cys Pro Val
405 410 415

Pro Ala Ala Ala Thr Ser Asn Val His Met Val Lys Lys Ile Ser Ile
420 425 430

Thr Glu Arg Ser Cys Asp Gly Ala Ala Gly Leu Pro Glu Val Pro Ala
435 440 445

Glu Ser Ser Ser Ser Pro Pro Gly Ser Glu Val Ala Ser Leu Thr Gln
450 455 460

Pro Glu Lys Ser Thr Gly Arg Val Pro Thr Gln Glu Pro Thr His Arg
465 470 475 480

Glu Pro Thr Arg Gln Ala Ala Ser Gln Glu Ser Glu Glu Ala Gly Gly
485 490 495

Thr Gly Gly Pro Pro Ala Gly Val Arg Ser Ile Met Lys Arg Lys Glu
500 505 510

Glu Val Ala Asp Pro Thr Ala His Arg Arg Ser Leu Gln Phe Val Gly
515 520 525

Val Asn Gly Gly Tyr Glu Ser Ser Ser Glu Asp Ser Ser Thr Ala Glu
530 535 540

Asn Ile Ser Asp Asn Asp Ser Thr Glu Asn Glu Ala Pro Glu Pro Arg
545 550 555 560

Glu Arg Val Pro Ser Val Ala Glu Ala Pro Gln Leu Arg Pro Ala Gly
565 570 575

Thr Ala Ala Ala Lys Thr Ser Arg Gln Glu Cys Gln Leu Ser Arg Glu
580 585 590

Ser Gln His Ile Pro Thr Ala Glu Gly Ala Ser Gly Ser Asn Thr Glu
595 600 605

Glu Glu Ile Arg Met Glu Leu Ser Pro Asp Leu Ile Ser Ala Cys Leu
610 615 620

Ala Leu Glu Lys Tyr Leu Asp Asn Pro Asn Ala Leu Thr Glu Arg Glu
625 630 635 640

Leu Lys Val Ala Tyr Thr Thr Val Leu Gln Glu Trp Leu Arg Leu Ala
645 650 655

Cys Arg Ser Asp Ala His Pro Glu Leu Val Arg Arg His Leu Val Thr
660 665 670

Phe Arg Ala Met Ser Ala Arg Leu Leu Asp Tyr Val Val Asn Ile Ala
675 680 685

Asp Ser Asn Gly Asn Thr Ala Leu His Tyr Ser Val Ser His Ala Asn
690 695 700

Phe Pro Val Val Gln Gln Leu Leu Asp Ser Gly Val Cys Lys Val Asp
705 710 715 720

Lys Gln Asn Arg Ala Gly Tyr Ser Pro Ile Met Leu Thr Ala Leu Ala
725 730 735

Thr Leu Lys Thr Gln Asp Asp Ile Glu Thr Val Leu Gln Leu Phe Arg
740 745 750

Leu Gly Asn Ile Asn Ala Lys Ala Ser Gln Ala Gly Gln Thr Ala Leu
755 760 765

Met Leu Ala Val Ser His Gly Arg Val Asp Val Val Lys Ala Leu Leu
770 775 780

Ala Cys Glu Ala Asp Val Asn Val Gln Asp Asp Asp Gly Ser Thr Ala
785 790 795 800

Leu Met Cys Ala Cys Glu His Gly His Lys Glu Ile Ala Gly Leu Leu

Asp Asp Glu Ser Pro Thr Ser Ser Ser Ala Glu Glu
865 870 875